

Handson Technology

User Guide

AHT10 High-Precision Digital Temperature & Humidity Sensor Module

The AHT10, a new generation of temperature and humidity sensors, sets a new standard in size and intelligence. The sensor outputs a calibrated digital signal in standard I^2C format. The AHT10 is equipped with a newly designed ASIC-specific chip, an improved MEMS semiconductor capacitive humidity sensing element and a standard on-chip temperature sensing element.





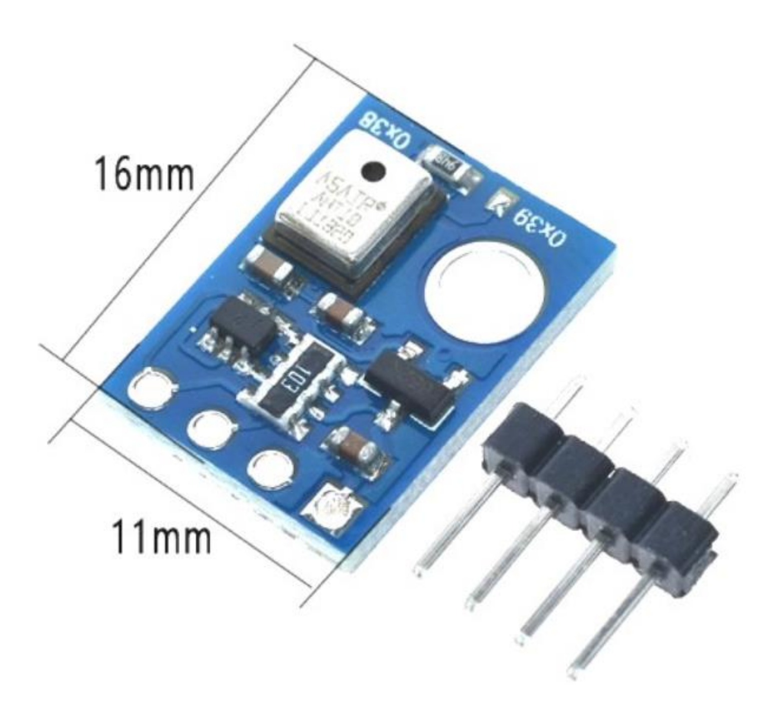
SKU: SSR1043

Brief Data:

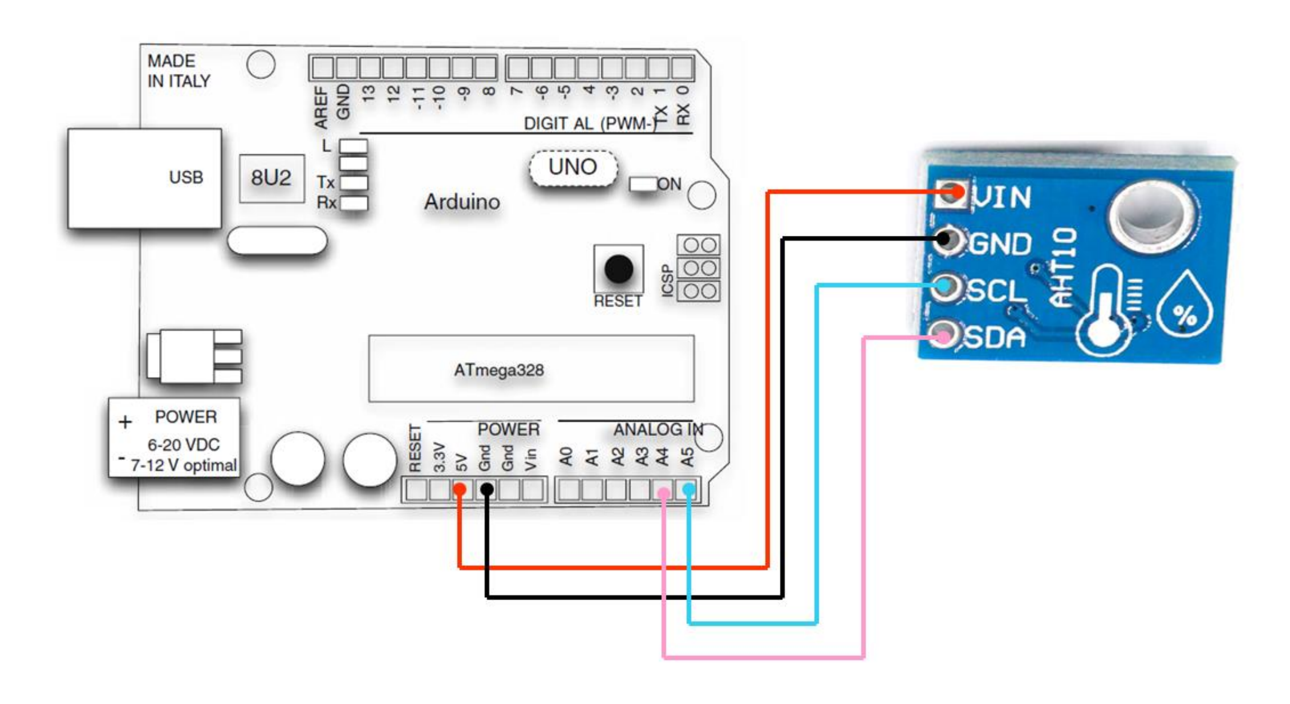
- Interface Type: I^2C.
- Working voltage: 3.3~5.0 Vdc.
- Measurement Range:
    - Temperature: -40ºC 85ºC.
    - Humidity: 0~100%.
- Humidity accuracy: typical ± 2%
- Humidity resolution: 0.024%
- Temperature accuracy: typical ± 0.3 ° C
- Temperature resolution: Typical 0.01 °C
- Module size: 16x11 mm.
- Working temperature: -40°C~85°C.

Mechanical Dimension:

Unit: mm

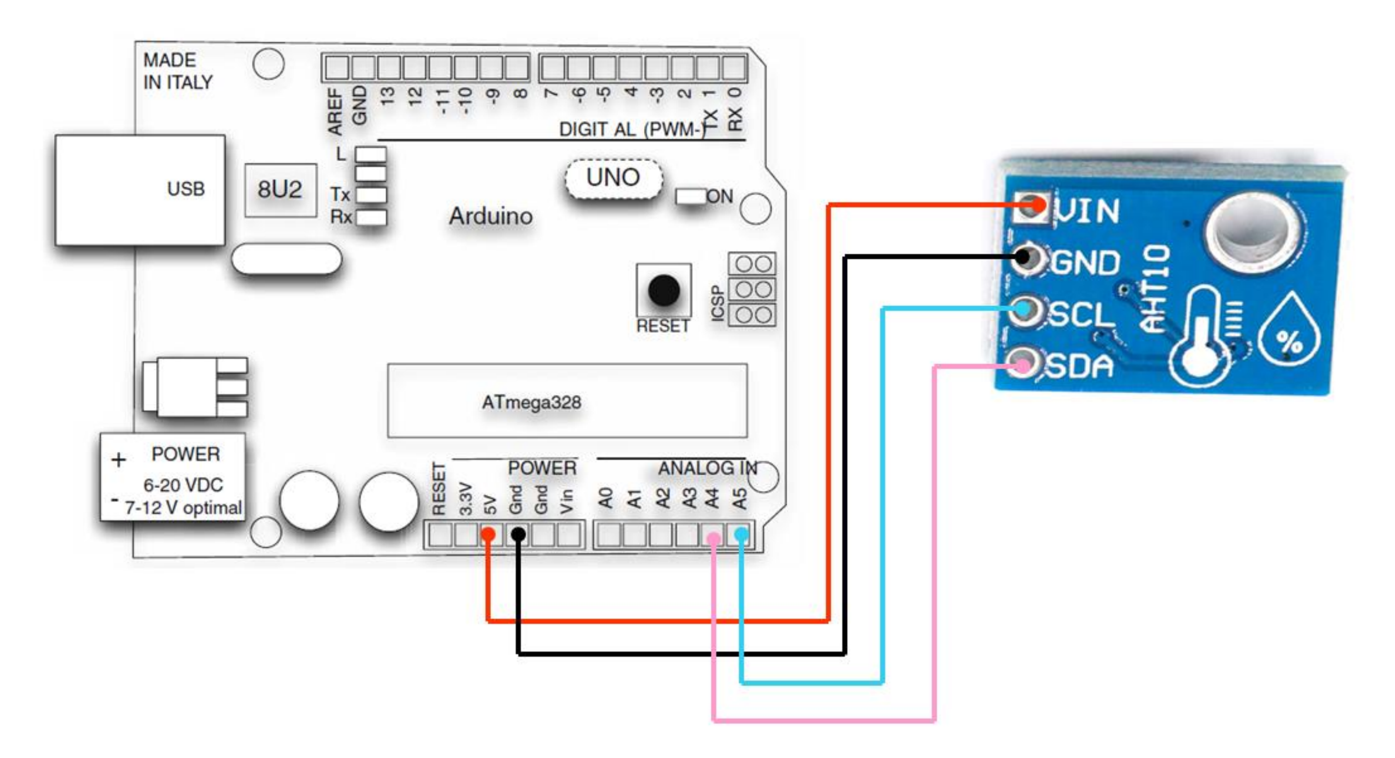


Pin Function Assignment:



Arduino Application Examples:

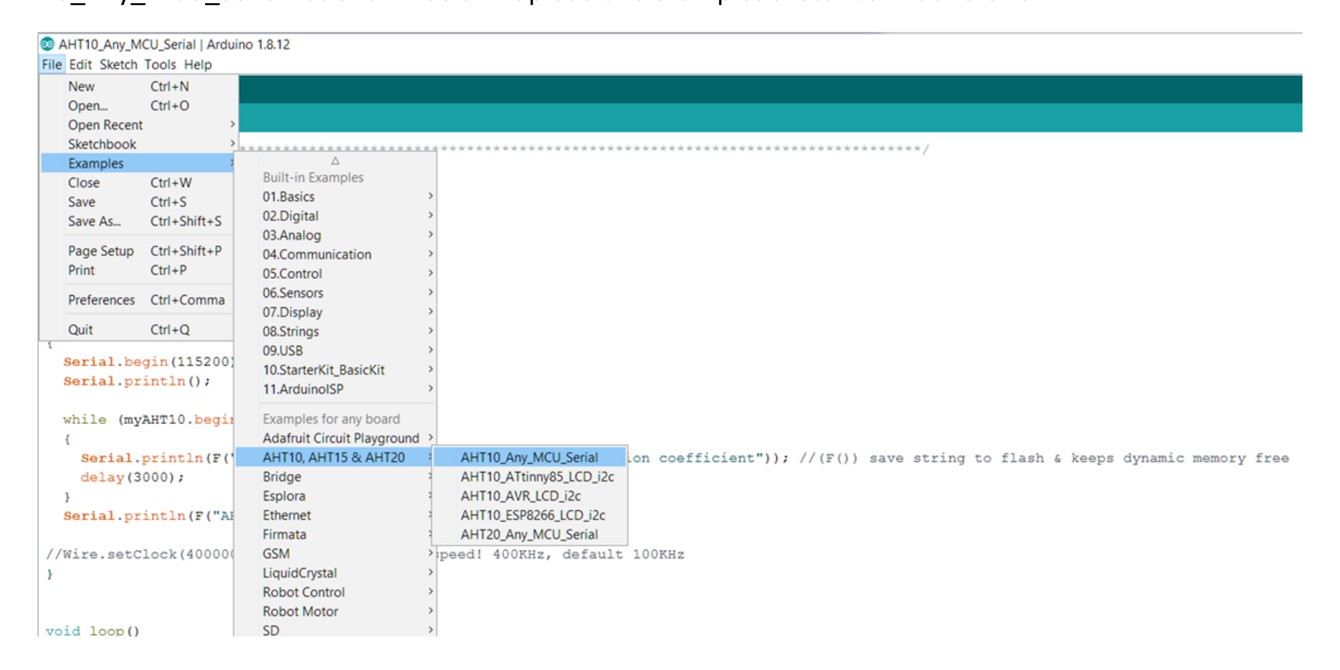
Wire up AHT10 sensor module to Arduino Uno board as shown in below connection:



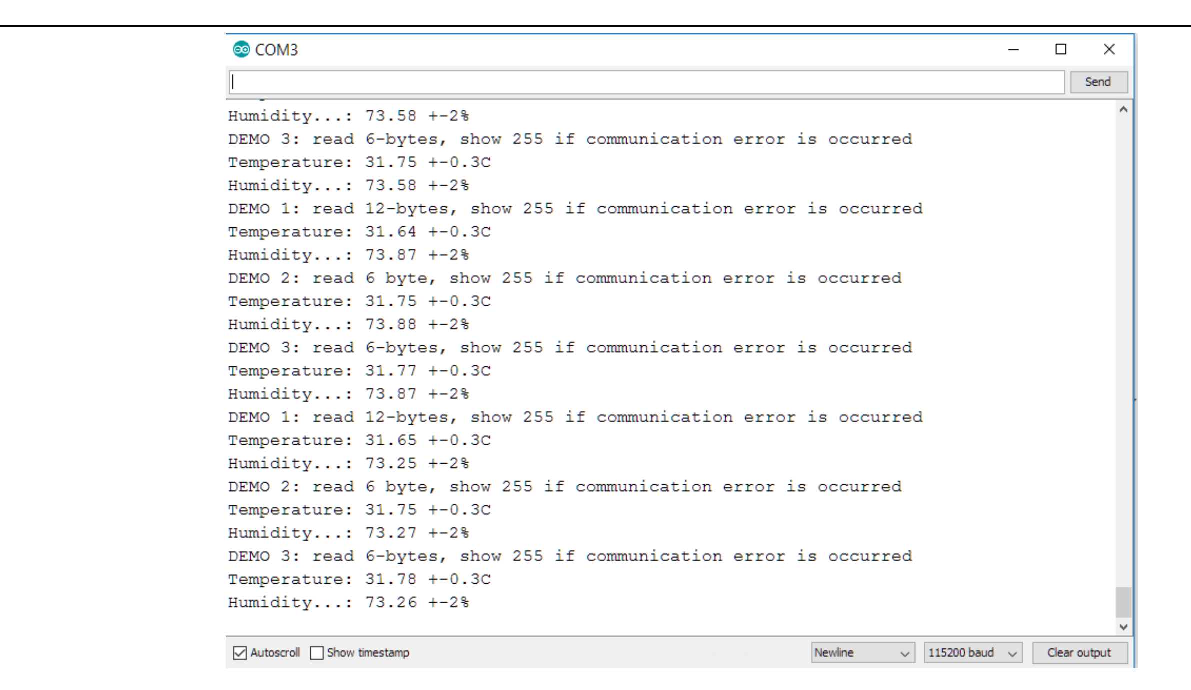
We need an Arduino library for AHT10 to work with Arduino boards. The library can be down load with the link below:

https://github.com/enjoyneering/AHT10

Copy this library to Arduino IDE Libraries folder and restart Arduino IDE. Locate the examples file " AHT10_Any_MCU_Serial" as shown below. Upload this examples sketch to Arduno Uno.



In the Serial Window, select a baud rate of 115200. The temperature and humidity data will be displayed as the below images:



Congratulation! You have correctly wired up and setup the library for AHT10 sensor to work in Arduino environments.

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